

What is Claimed is:

1. An apparatus for delivering pressurized gas to the airway of a patient, the apparatus comprising:
 - a housing;
 - a gas flow generator mounted within the housing and adapted to provide a flow of a pressurized gas;
 - a patient circuit coupled to the gas flow generator and adapted to communicate the flow of gas with an airway of a patient; and
 - a first injection molded thermoplastic elastomeric member positioned between the housing and the gas flow generator so as to minimize noise resulting from vibration of the gas flow generator.
2. The apparatus of claim 1, wherein the first injection molded thermoplastic elastomeric member is disposed on a first side of the gas flow generator, and further comprising a second injection molded thermoplastic elastomeric member disposed on a second side of the gas flow generator opposite the first side.
3. The apparatus of claim 2, further comprising:
 - a mounting plate disposed within the housing and supporting the gas flow generator; and
 - a securing member adapted to position and hold the gas flow generator on the mounting plate, wherein the first injection molded thermoplastic elastomeric member is positioned between the gas flow generator and the mounting plate and the second injection molded thermoplastic elastomeric members is positioned between the securing member and the mounting plate.

4. The apparatus of claim 3, wherein the securing member includes a recess sized and configured so as to receive and locate a portion of the gas flow generator and the second injection molded thermoplastic elastomeric members, and at least two attaching legs extending to and fastened to the mounting plate.

5. The apparatus of claim 3, further comprising:
a valve attached to the mounting plate; and
a third injection molded thermoplastic elastomeric member disposed between the valve and the mounting plate.

6. The apparatus of claim 1, further comprising an injection molded thermoplastic elastomeric tubular coupling between the gas flow generator and the patient circuit.

7. An apparatus for delivering pressurized gas to the airway of a patient, the apparatus comprising:
a housing;
a mounting surface disposed on the housing;
a blower assembly operatively coupled to the mounting surface and adapted to generate a flow of a pressurized gas;
a patient circuit coupled to the blower assembly and adapted to communicate the flow of gas to an airway of a patient;
a first vibration damping member disposed on a first side of the blower assembly so as to space the blower assembly from the mounting surface upon which the blower assembly is supported;
a securing member positioning and holding the blower assembly onto the mounting surface; and

a second vibration damping member disposed on a second side of the blower opposite the first side so as to space the blower assembly from the securing member.

8. The apparatus of claim 7, wherein the securing member is a rigid member that includes:

a recess for receiving and locating a portion of the blower assembly and the second vibration damping member, and

at least two attaching legs extending to and fastened to the mounting surface.

9. The apparatus of claim 8, wherein the second vibration damping member includes a recess receiving a portion of the blower assembly.

10. The apparatus of claim 9, wherein the mounting surface is on a rigid mounting plate secured to the housing.

11. The apparatus of claim 10, further comprising an injection molded thermoplastic elastomeric tubular coupling between the blower assembly and the patient circuit.

12. The apparatus of claim 11, further comprising a valve attached to the mounting plate in fluid communication with the patient circuit, and an additional injection molded thermoplastic elastomeric member is positioned between the valve and the mounting plate.

13. A vibration isolation mounting system for a blower assembly mounted in a housing, the system comprising:

a mounting surface supporting the blower assembly within a housing;

a first vibration damping member disposed on a first side of the blower assembly spacing the blower assembly from the mounting surface;

a securing member positioning and holding the blower assembly to the mounting surface; and

a second vibration damping member disposed on a second side of the blower assembly opposite the first side and spacing the blower assembly from the securing member.

14. The system of claim 13, wherein the securing member is a rigid member that includes:

a recess receiving and locating a portion of the blower assembly and the second vibration damping member, and

at least two attaching legs extending to and fastened to the mounting surface.

15. The system of claim 14, wherein the first and the second vibration damping members are injection molded thermoplastic elastomeric members.

16. The system of claim 15, wherein the mounting surface is on a rigid mounting plate secured to the housing.

17. The system of claim 16, further comprising an injection molded thermoplastic elastomeric coupling attached to the blower assembly.

18. The system of claim 15, wherein the thermoplastic elastomeric members are formed of a rubber compound of about 2.79 durometers.

19. The system of claim 15, further comprising an injection molded thermoplastic elastomeric tubular coupling attached to the blower assembly, wherein the

tubular coupling includes a pair of end sections and an intermediate section with a wall thickness less than that of the end sections.

20. The system of claim 15, wherein at least one of the vibration damping members includes a recess for receiving a portion of the blower assembly.